PART III - CONTAINER STORAGE

AREA 5 HAZARDOUS WASTE STORAGE UNIT (HWSU)

III.A. SUMMARY

The Hazardous Waste Storage Unit (HWSU) is a pre-fabricated, rigid-steel framed, roofed shelter used to store hazardous, nonradioactive waste generated on the NTS. The unit was originally designed as a 90-day nonradioactive Hazardous Waste Accumulation Site (HWAS) and has been in operation as such since 1990. In 1995 the NDEP permitted the HWAS as a RCRA HWSU in order to provide the NTS with increased storage capability for hazardous waste.

The concrete storage area floor is 31 m (100 ft) long by 9.1 m (30 ft) wide. 15 cm (6 in.) curbs are provided above the 15 cm (6 in.) thick floor slab around the perimeter of the structure and between the five segregated accumulation areas as described in **Table P.4.d-1 Containment Capacity by Storage Cell** in § P.4.d.2 of the permit application. The Permittee is allowed to store a maximum of 61,600 *l* (16,280 gal) of approved waste at a time. The Permittee shall use containers of size and type consistent with current DOT standards in accordance with applicable regulations for wastes being prepared for shipment from the Nevada Test Site per 40 CFR §262.30. All containers used for the storage of regulated wastes shall conform with Subpart CC air emission standards. The Permittee shall notify the Administrator at the time of implementation of any newly required container management practices. Containers holding liquids are placed on poly-spill pallets for secondary containment. Each pallet is equipped with a sump capable of holding 208 *l* (55 gal) of liquid. The total volume of the HWSU floor available for tertiary containment is 39,500 *l* (10,440 gal) or approximately 64 percent of the maximum storage volume.

III.B. PERMITTED AND PROHIBITED WASTE IDENTIFICATION

III.B.1. The Permittee is authorized to store and manage the following nonradioactive hazardous wastes in containers in the Area 5 HWSU subject to the terms of this permit.

No.	Hazardous Waste Description	EPA Hazardous Waste Code
1	Ignitable	D001
2	Corrosive	D002
3	Reactive	D003
4	Arsenic (Toxic)	D004
5	Barium (Toxic)	D005
6	Cadmium (Toxic)	D006
7	Chromium (Toxic)	D007
8	Lead (Toxic)	D008
9	Mercury (Toxic)	D009
10	Selenium (Toxic)	D010
11	Silver (Toxic)	D011
12	Endrin (Toxic)	D012
13	Lindane (Toxic)	D013
14	Methoxychlor (Toxic)	D014
15	Toxaphene (Toxic)	D015
16	2.4-D (Toxic)	D016
17	2,4,5-TP (Silvex) (Toxic)	D017
18	Benzene (Toxic)	D018
19	Carbon tetrachloride (Toxic)	D019
20	Chlordane (Toxic)	D020
21	Chlorobenzene (Toxic)	D021
22	Chloroform (Toxic)	D022
23	o-Cresol (Toxic)	D023

No.	Hazardous Waste Description	EPA Hazardous Waste Code
24	m-Cresol (Toxic)	D024
25	p-Cresol (Toxic)	D025
26	Cresol (Toxic)	D026
27	1,4-Dichlorobenzene (Toxic)	D027
28	1,2-Dichloroethane (Toxic)	D028
29	1,1- Dichloroethylene (Toxic)	D029
30	2,4- Dinitrotoluene (Toxic)	D030
31	Heptachlor (and its epoxide) (Toxic)	D031
32	Hexachlorobenzene (Toxic)	D032
33	Hexachlorobutadiene (Toxic)	D033
34	Hexachloroethane (Toxic)	D034
35	Methyl ethyl ketone (Toxic)	D035
36	Nitrobenzene (Toxic)	D036
37	Pentachlorophenol (Toxic)	D037
38	Pyridine (Toxic)	D038
39	Tetrachloroethylene (Toxic)	D039
40	Trichloroethylene (Toxic)	D040
41	2,4,5- Trichlorophenol (Toxic)	D041
42	2,4,6- Trichlorophenol (Toxic)	D042
43	Vinyl chloride (Toxic)	D043
44	Spent halogenated solvents (Toxic)	F001
45	Spent halogenated solvents (Toxic)	F002
46	Spent non-halogenated solvents (Ignitable)	F003
47	Spent non-halogenated solvents (Toxic)	F004
48	Spent non-halogenated solvents (Ignitable, Toxic)	F005
49	Electroplating wastewater treatment sludges (Toxic)	F006

No.	Hazardous Waste Description	EPA Hazardous Waste Code
50	Spent cyanide plating bath residues (Reactive, Toxic)	F007
51	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (Reactive, Toxic)	F009
52	Pentachlorophenol (Acute Toxicity)	F027
53	Arsenic oxide As_2O_3(Acute Toxicity)	P012
54	Beryllium (Acute Toxicity)	P015
55	Carbon disulfide (Acute toxicity)	P022
56	Cyanides (soluble cyanide salts), not otherwise specified (Acute toxicity)	P030
57	Epinephrine (Acute toxicity)	P042
58	Expired Medical Nitroglycerine (Reactive, Acute Toxicity)	P081
59	Mercury (acetato-O)phenyl- (Acute toxicity)	P092
60	Phosgene (Acute toxicity)	P095
61	Potassium cyanide (Acute toxicity)	P098
62	Silver cyanide (Acute toxicity)	P104
63	Sodium azide (Acute toxicity)	P105
64	Sodium cyanide (Acute toxicity)	P106
65	Ammonium Vanadate (Acute toxicity)	P119
66	Vanadium pentoxide (Acute toxicity)	P120
67	Acetone (Ignitable)	U002
68	Acetonitrile (Ignitable, Toxic)	U003
69	Acetophenone (Toxic)	U004
70	Acrylamide (Toxic)	U007
71	Aniline (Ignitable, Toxic)	U012
72	Benzene (Ignitable, Toxic)	U019
73	Benzo[a]pyrene (Toxic)	U022
74	n-Butyl alcohol (Ignitable)	U031

No.	Hazardous Waste Description	EPA Hazardous Waste Code
75	Chlorobenzene (Toxic)	U037
76	Chloroform (Toxic)	U044
77	o-Chlorophenol (Toxic)	U048
78	Cresol (Toxic)	U052
79	Cyclohexane (Ignitable)	U056
80	Cyclohexanone (Ignitable)	U057
81	o-Dichlorobenzene (Toxic)	U070
82	p-Dichlorobenzene (Toxic)	U072
83	Dichlorodifluoromethane (Toxic)	U075
84	Ethane, 1,2-dichloro (Toxic)	U077
85	Methane, dichloro (Toxic)	U080
86	2,4-Dichlorophenol (Toxic)	U081
87	2,6-Dichlorophenol (Toxic)	U082
88	N,N'-Diethylhydrazine (Toxic)	U086
89	Dimethlyl sulfate (Toxic)	U103
90	1,4-Dioxane (Toxic)	U108
91	Ethyl acetate (Ignitable)	U112
92	Ethyl ether (Ignitable)	U117
93	Fluoranthene (Toxic)	U120
94	Methane, trichlorofluoro- (Toxic)	U121
95	Formaldehyde (Toxic)	U122
96	Formic acid (Corrosive, Toxic)	U123
97	Glycidyaldehyde (Toxic)	U126
98	Lindane (Toxic)	U129
99	Hydrofluoric acid (Corrosive, Toxic)	U134

No.	Hazardous Waste Description	EPA Hazardous Waste Code
100	Isobutyl alcohol (Ignitable, Toxic)	U140
101	Mercury (Toxic)	U151
102	Methanol (Ignitable)	U154
103	2- Butanone (Ignitable, Toxic)	U159
104	2- Butanone peroxide (Reactive, Toxic)	U160
105	Methyl isobutyl ketone (Ignitable)	U161
106	Naphthalene (Toxic)	U165
107	2-Nitropropane (Ignitable, Toxic)	U171
108	Phenol(Toxic)	U188
109	Pyridine (Toxic)	U196
110	p-Benzoquinone (Toxic)	U197
111	Resorcinol (Toxic)	U201
112	1,1,1,2-Tetrachloroethane (Toxic)	U208
113	1,1,2,2-Tetrachloroethane (Toxic)	U209
114	Ethene,tetrachloro- (Toxic)	U210
115	Methane, tetrachloro- (Toxic)	U211
116	Tetrahydrofuran (Ignitable)	U213
117	Thioacetamide (Toxic)	U218
118	Thiourea (Toxic)	U219
119	Toluene (Toxic)	U220
120	Toluenediamine (Toxic)	U221
121	Toluene diisocyanate (Reactive, Toxic)	U223
122	Methyl chloroform (Toxic)	U226
123	1,1,2- Trichloroethane (Toxic)	U227
124	Trichloroethylene (Toxic)	U228
125	Xylene (Ignitable)	U239

III.B.2. The Permittee is prohibited from storing hazardous waste that is not identified in Permit Condition III.B.1.

III.C. CONDITION OF CONTAINERS

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit as required by 40 CFR § 264.171.

III.D. COMPATIBILITY OF WASTE WITH CONTAINERS

The Permittee shall assure that the container material or lining is compatible with the stored material and the ability of the container to contain the waste is not impaired by potential reactions between the stored material and container as required by 40 CFR § 264.172.

III.E. MANAGEMENT OF CONTAINERS

The Permittee shall manage all containers as required by 40 CFR § 264.173 and as specified in § P.4.d.4 of the permit application. The Permittee must maintain a minimum of 0.9 meter (three [3] feet) of aisle space between rows of pallets, with each individual pallet supporting containers with a total capacity not to exceed 830 *l* (220 gallons).

III.F. CONTAINMENT SYSTEM

The Permittee shall maintain the containment system in accordance with § P.4.d.1(2) of the permit application and the requirements of 40 CFR § 264.175.

III.G. INSPECTION SCHEDULES AND PROCEDURES

The Permittee shall inspect the container area weekly, in accordance with the **HWSU Inspection Schedule**, Table P.4.f-1 of the permit application, to detect leaking containers and deterioration of containers and the containment system caused by corrosion and other factors as required by 40 CFR § 264.174.

III.H. RECORDKEEPING

The Permittee shall place the results of all waste analyses along with documentation showing compliance with Permit Condition III.J. in the Facility operating record. [40 CFR §§ 264.17(c) and 264.73]

III.I. CLOSURE

At closure of the HWSU, the Permittee shall remove all hazardous waste and hazardous waste residues from the containment system, in accordance with the procedures in the **HWSU Closure and Post-Closure Plan** in § P.4.i of the permit application. [40 CFR § 264.178]

III.J. SPECIAL CONTAINER PROVISIONS FOR IGNITABLE OR REACTIVE WASTE

The Permittee shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste and follow the procedures specified in § F.3.E of the permit application and 40 CFR § 264.17(a).

III.K. SPECIAL CONTAINER PROVISIONS FOR INCOMPATIBLE WASTE

III.K.1. The Permittee shall not place incompatible wastes, or incompatible wastes and materials, in the same container. [40 CFR § 264.177(a)]

III.K.2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material. [40 CFR § 264.177(b)]

III.K.3. The Permittee shall separate containers of incompatible wastes as required by 40 CFR § 264.177(c). An example of a segregation arrangement is provided in **Figure P.4.d-1 HWSU and Pallet Layout** in § P.4.d of the permit application.